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10/606,850	06/26/2003	Curtis A. Richardson	89190.022003/DP309241	5766

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DELPHI TECHNOLOGIES, INC.  
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EXAMINER
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MARTIN, ANGELA J

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1745

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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**GROUP 170C**

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/606,850  
Filing Date: June 26, 2003  
Appellant(s): RICHARDSON ET AL.

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Dennis B. Danella  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11/30/06 appealing from the Office action mailed 10/30/06.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

2003/0235723 A1	SIMPKINS et al	12-2003
6,626,650 B1	KENCHINGTON et al	09-2003

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**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 11-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simpkins et al., U.S. Pat. Application Pub. 2003/0235723 A1, in view of Kenchington et al., U.S. Pat. No. 6,626,650 B1.

Rejection of claims 11-29 drawn to a fuel cell assembly.

Simpkins et al., teach a fuel cell assembly comprising a fuel cell stack, a supporting structure, and a gas spring disposed with the assembly (abstract) between the stack and supporting structure (Fig. 3), the spring including a first and second membranes (sect. 0033), means for sealing edges of the membranes to define a closed chamber for capture of gas (sect. 0033). It teaches a solid oxide fuel cell (sect. 0025-0027).

Simpkins et al., do not teach a first and second valve means.

Kenchington et al., teach a first (col. 8, lines 1-4) and second valve means (col. 13, lines 6-14) for fluid displacement (col. 3, lines 15-21), which may be used in a fuel cell system (col. 6, lines 4-9), and a gas spring disposed with the assembly (col. 3, lines 7-9).

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to insert the teachings of Kenchington et al., into the teachings of Simpkins et al., because Kenchington et al., teach that the first and second valve means allow gas to be expelled only when a pressure differential is established, which would prevent a portion of gas from leaking in an opposite direction from the flow of gas.

#### **(10) Response to Argument**

The arguments and remarks advanced by the Appellant in the appeal brief dated 01/31/07 have been fully considered but they are unpersuasive.

Appellant argues that "the Kenchington reference is non-analogous art and that it is improper to combine the teachings of the Kenchington reference with the Simpkins reference." However, although the Kenchington reference discloses an internal combustion engine or an electrically operated engine, and Simpkins teaches a fuel cell, both references are chemical reactors which produce power and are linked by chemical reactions requiring a constant influx into the chemical chambers; therefore the Kenchington reference and the Simpkins reference are analogous art.

Appellant argues that "the first and second valve means both recite the necessary structure (i.e., a valve) to perform the claimed function of admitting gas to the chamber and exhausting gas from the chamber, respectively, and therefore are not in means-plus function format." Since the Appellant is not invoking 35 U.S.C. 112, Sixth Paragraph, then the valves of the Kenchington reference are taken to be structurally and functionally equivalent to the Appellant's check valve, since the valves in the

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Kenchington reference and the valves of the Appellant's application each prevent a backflow in the piping.


**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Angela Martin

  
PATRICK JOSEPH  
SUPERVISORY PATENT EXAMINER

Conferees:

Patrick Ryan 

William Krynski 